



Northern Avenue Bridge  
Mayoral Advisory Task Force  
Meeting #12 – December 10, 2019

WPI Seaport

## **SUMMARY**

### **WELCOME**

Chairman Rick Dimino, A Better City, opened the meeting and welcomed the Mayoral Advisory Task Force (MATF) and members of the public in attendance. He noted there were questions raised at the previous meeting (held on June 27) that the City and project team needed to answer. The City and consultants have done a significant amount of work over the past six months to refine the bridge concepts that will be presented at this meeting. This is the final MATF meeting, but Chairman Dimino explained that public engagement will continue through the design process.

Vice Chair Sara McCammond thanked the MATF members and members of the public who have been involved through the process and said she looks forward to continuing to work with everyone.

Chris Osgood, City of Boston Chief of Streets, thanked the MATF on behalf of the Mayor. He said Mayor Walsh inherited the bridge, had to close it to travel early in his term, and his administration has prioritized taking action to restore the bridge. Mr. Osgood said the MATF pushed the City's thinking, deepened its analysis, and improved the engagement. He thanked the members of the MATF, consultants on the project team, city officials, and the public. He reiterated that although this is the final MATF meeting, it is still early in the public process for this project.

Chairman Dimino asked if the Task Force members had any edits to the summary from Meeting #11 (June 27). There was a motion, which was seconded, to approve the minutes with no edits.

### **UPDATE – HONORING HISTORY<sup>1</sup>**

Ben Rosenberg, Principal and Structural Engineer at Silman, presented on Silman's role as the historic preservation consultants to AECOM for the project. He explained that the project team has already engaged the Massachusetts Historical Commission (MHC) very preliminarily and begun a dialogue, as the bridge will go through the Section 106 process.

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<sup>1</sup> The presentation from the meeting is available on the Project Documents page of the project website, [www.boston.gov/northern-ave](http://www.boston.gov/northern-ave).

Mr. Rosenberg showed pictures of the existing conditions of the bridge and described the condition of various structural members. The deck structure shows the most severe corrosion. He explained that from a historical point of view, it is feasible to repair or retrofit the majority of deck structural members but that the deck structure is in poor enough condition that it is more appropriate to replace it. The truss superstructure is in better condition overall than the deck, especially at the higher elevations. Based on input from AECOM on fatigue concerns in certain tension members, there are concerns with reusing diagonal eyebars.

Overall, Mr. Rosenberg explained how he has reviewed each discrete bridge member to develop various options for reuse or replacement while being historically sensitive. He shared examples of other projects in which Silman has done similar work, including the Battery Maritime Building in New York City. He will continue to assist the team and the City in striking the right balance between reusing/repairing/retrofitting existing structural members and honoring the historical integrity of the structure. He offered to speak more in depth with attendees after the meeting.

Bud Ris, Green Ribbon Commission, asked Mr. Rosenberg for his opinion about what this means for the design of the bridge. Mr. Rosenberg said the intent of how the bridge will be used is outside of Silman's scope, however, he will inform the team given the results of the structural analysis prepared by AECOM, resiliency needs, and other factors, how potential bridge options can be historically sensitive and how best to incorporate existing elements on the bridge in the selected scheme(s).

Greg Galer, Boston Preservation Alliance, asked if AECOM's cost estimates for restoring the bridge were in the right ballpark, noting the high cost estimates have led many to believe a restoration option should not move forward. Mr. Rosenberg said in a project of this type, reuse is typically more expensive than new construction, especially with the unknowns that occur when restoring an old structure. He noted AECOM made those estimates for specific schemes without looking at other options, and it was appropriate for them to include a large contingency for unknown costs, however he cannot give an opinion on the exact numbers.

Carol Chirico, General Services Administration, asked what MHC's approach to this project is based on the preliminary conversations. Mr. Rosenberg said the bridge will go through the Section 106 process and MHC is concerned about the historic elements of the bridge. He said that MHC are advocates for preservation and they will ask appropriately vigorous questions of any design that moves forward, and that the design team looks forward to continued engagement.

Mr. Galer said he heard that MHC thought there was not a lot of specifics in what was shared with them and they asked for clarity on life cycle costs. Mr. Rosenberg said it is true the project team engaged with MHC earlier in the process than is typical. Usually, a project team reaches out to MHC when a specific project design is proposed, but in this case, the project team reached out before a project was even selected. Mr. Rosenberg said MHC has already requested a number of pieces of information, including input from the lead federal agency (likely the Coast Guard) as well as the additional cost information. The conversations with MHC will continue.

## HOW WE GOT HERE

Joe Allwarden, AECOM, summarized the work the project team has done in the past couple years and more recently the last six months. He listed previous planning studies and a timeline of the bridge.

Mr. Allwarden reviewed what the project team and City have heard from the MATF and the public on each goal (Honoring History, Improving Mobility, Increasing Resiliency, and Creating a Destination), and how this feedback has been interpreted and the implications for the bridge's style and size, as follows:

### *Honoring History*

- It is a priority, if possible, to reflect the profile of the bridge.
- Reuse of most of the existing bridge elements would require repair or reinforcement.
- There are concerns with reusing 100-year-old original steel in main truss structural members.
- The cost and uncertainties are high for rehabilitation of the current bridge.

### *Improving Mobility*

- The bridge has to work first and foremost for people on foot and cyclists.
- Its design and use should not preclude emergency access or egress.
- **On the first day limiting to walking, biking, transit and emergency vehicles.**
- Can evolve over time.

### *Increasing Resiliency*

- The bridge must be raised.
- A raised bridge eliminates the need for a moveable bridge.
- There is not an obvious role the bridge plays as a flood barrier in the channel.

### *Creating a Destination*

- The bridge should be both an icon and one that complements the Channel.
- Narrower approaches lead to better integration into the neighborhood.
- The experience of crossing the bridge is equally as important, as the experience of being on it.
- While a pavilion isn't essential, if it exists, it should focus on connecting people to the water.

Mr. Allwarden explained what these implications mean for the bridge's design, as follows:

- Bridge Height: Raised for resiliency
- Bridge Movement: Fixed for simplicity
- Bridge Width: Narrow as possible in general, particularly at the ends
- Bridge Profile: Reflects the historic profile, if possible
- Bridge Style: Reinforces the history of the bridge
- Bridge Destination: Provides a complementary space, focused on the water
- **Bridge Use: On the first day limiting to walking, biking, transit and emergency vehicles ... a *People First Experience***

- Bridge Use: Can evolve over time

### CREATING ICONIC *PEOPLE FIRST* EXPERIENCES

Etty Padmodipoetro, Urban Idea Lab, presented conceptual renderings of the pavilion, which will provide people with a destination with views of the water. She said the project team knows the Northern Avenue Bridge is loved by many, and if the bridge is going to change, then it should be another bridge that people love. She noted that the design received a breakthrough moment when the decision was made to include the area under the bridge (that was once part of the swing span) as part of the bridge design. This area is called the “pavilion” and it will be raised in elevation so it will remain dry year-round.

Ms. Padmodipoetro further explained that the bridge at its mid-point was designed to be as wide as possible to maximize the center area, with narrower ends to maximize flexibility in meeting the existing grade. This allows for a smooth transition to Atlantic Avenue as well as to the Harborwalk on the Wharf District side, and to Sleeper Street and adjacent stakeholders on the Seaport side. In addition, she presented renderings that showed what people would see as they walk down to the pavilion and look out to the water.

Ms. Padmodipoetro presented the following conceptual designs of the bridge with the pavilion:

- Basic
  - **Basic Bridge** – two narrow through travel bridge spans with a simple opening in the middle to step down onto the pavilion. This layout was the selected concept by which other options were tested.
- Bold:
  - **Sail**– This is the bold cable-stay option that was shown in previous meetings. In this option, the pylon lands in the middle of the pavilion, which compromises space below
  - **Single Arch** – this is a cable-stay hybrid bridge, the structures of the arches are on the outside of the bridge; no structure is in the middle of the pavilion
  - **Double Arch** – this is also a cable-stay bridge. In this option, the arches can be narrower, and high enough that it creates an iconic profile that can be seen from a distance
  - **Boston Bold** – This is the basic bridge with a truss structure on top to evoke the old bridge, and creates more intimate spaces

Ms. Padmodipoetro said having a *people first* concept is the right direction for the project, and any design that moves forward will retain the essence of the experiences shown in these renderings.

Stacy Thompson, LivableStreets, thanked the design team for their hard work and said they have done an excellent job. She said she has been committed to *people first* throughout the process. Para Jayasinghe, City of Boston, thanked Ms. Thompson for raising the bar to where it needed to be.

Kathy Abbott, Boston Harbor Now, said she loved the people first concepts. She asked why the pavilion was placed in between the two bridge spans as opposed to the two spans being together with the pavilion on the side. She also noted there were no transit vehicles in the renderings.

Ms. Padmodipoetro responded by explaining that the separation of the lanes and placement of the access to the water in the middle allows for the “stepping down” experience and maximizes the space more so than if the pavilion were to the side. Mr. Jayasinghe said the design is an oval shape to keep the ends as narrow as possible with a wide middle space. He confirmed the administration is committed to having no cars on the bridge on day one.

Mr. Ris applauded the design team for the people first design because it reflects what has been discussed. He likes the narrow ends and presumes the design team is considering the future Hook Building in the design of the end treatments. Mr. Ris said he usually doesn’t associate being underneath a structure to being a pleasant experience. Mr. Jayasinghe said there is an additional animation of the pavilion that will be presented and said lighting will be key. Ms. Padmodipoetro said the underside of the roadways will be designed completely to maintain an airy and open experience.

Vice Chair McCammond noted these are still conceptual designs, and there is still work to be done in refining those details as well as the end treatments.

Ms. Thompson said it appears the City hasn’t determined what “transit” means exactly and asked when vehicles will be shown in the design. Mr. Jayasinghe said he is permitted to say “no cars” on the bridge, and the priority users are pedestrians and bicyclists. Richard Martini, The Fallon Company, agreed the presence of transit vehicles will impact how these concepts are received. Ms. Thompson would like to see shuttles/transit on the bridge at the 25% design point when the design is presented to the public, especially to see where the buses and pedestrians will go. Mr. Galer agreed. Mr. Jayasinghe said he has renderings of buses that he can put into future materials.

Mr. Galer asked if there is an opportunity to reuse some elements of the historic bridge. Mr. Jayasinghe said there is an opportunity and Mr. Rosenberg has already been looking into this.

Chairman Dimino said he believes the “people’s” experience also includes transit so he is glad to see it is part of the project, and noted there will be more time throughout the design process to discuss this. Mr. Jayasinghe said the delineation of buses and pedestrians on the bridge will be defined as the project advances.

Ms. Chirico asked about the grade at the Moakley Courthouse side of the bridge and if the existing Harborwalk will have to be raised. She wants to know how it will impact government property. Mr. Allwarden said the team will be showing an animation shortly that includes this. The design hasn’t changed since it was last presented.

Mr. Martini said there are going to be conflicts at the ends of the bridge where people and transit are entering and exiting. He said the design team may want to consider moving the park to the side to relieve the potential conflicts.

Ms. Abbott acknowledged it is a big deal that the City is no longer considering single-occupancy vehicles on the bridge and wanted to give credit for it.

Vice Chair McCammond is pleased to see that placemaking and creating a destination are now included in the initial bridge design as opposed to a separately funded phase 2.

Ms. Thompson said she loves the placemaking and is glad to see it incorporated. She would like to see a long-term maintenance plan and an explanation of who will be responsible for maintaining the space at the next public meeting.

### **NEXT STEPS**

Mr. Allwarden presented the next steps for the project:

- Selection of Preferred Concept and Public Meeting (1<sup>st</sup> Quarter 2020)
- 25% Design and Design Public Hearing (3<sup>rd</sup> Quarter 2020)
- 100% Design (2021)

He noted there will be stakeholder briefings in addition to public meetings, so all members of the MATF will have more chances to share feedback.

Mr. Ris asked if the City is aware that Boston Water and Sewer has plans for a tidal gate. Mr. Jayasinghe said he and his colleagues have been in discussion with BWSC on this.

### **LIVE ANIMATION**

Tanner Halkyard, AECOM, showed an interactive rendering of the design concepts presented, in which he used an Xbox controller to “walk” through each concept and view it from different angles. Attendees of the meeting had the opportunity to use the controllers after the meeting to view the concepts.

### **PUBLIC COMMENTS**

Chairman Dimino asked the members of the public to provide comments.

Steve Hollinger said he doesn’t understand why the pavilion area is considered with sea level rise. He said if the City is considering including transit on the bridge, then the conceptual renderings should show those vehicles. He asked the City why they chose not to show transit in the renderings presented at this meeting. Mr. Jayasinghe said the pavilion is raised high enough that even in 2070 it will not be immersed in water. Mr. Jayasinghe said the City believes the bridge will belong to pedestrians and cyclists and once the design advances the rendering will show transit; the City may use painted bus lanes to ensure buses drive more slowly and maintain separation. Alternatively, certain roadway surface materials can be used that indicate to drivers that they are on a shared space, similar to Downtown Crossing.

Mike Tyrell applauded the design team. He said the Boston Bold option is too literal, and suggested the team look at the North Washington Street Bridge Project and do

something complementary that bookends the City. He said the steps down to the pavilion allow for tremendous design potential.

Robin, a resident, says she walks and drives in the area of the bridge and is concerned about how transit vehicles will navigate the corner where the Barking Crab is located. She said the City should also think about how to prevent vehicles from driving over the bridge.

Cecilia, a resident, said she attended a South Boston Seaport Strategic Transit Plan public meeting the previous night and asked if this project is aware of that study. She also asked why the steps down to the pavilion are not on the Atlantic Avenue side of the bridge. Mr. Jayasinghe noted that Jim Fitzgerald, BPDA, is in attendance and he is the project manager of the South Boston Seaport Strategic Transit Plan. He noted the two project teams are coordinating. Mr. Jayasinghe explained that the presence of the navigable water channel below the bridge on the Seaport side dictates where the steps can be placed.

Chairman Dimino and Vice Chair McCammond thanked the Task Force members and consultants once again for their commitment to this project and their public engagement.

Attendees were then invited into breakout rooms to use the controllers to navigate around the 3-D renderings of the bridge concepts.

#### **TASK FORCE MEMBERS**

Congressman Stephen Lynch (not present)  
Senator Nick Collins (not present)  
Councilor Michael Flaherty (not present)  
Councilor Ed Flynn (not present)

Rick Dimino, Chair, A Better City  
Sara McCammond, Vice Chair, Fort Point Neighborhood Association

Kathy Abbott, Boston Harbor Now  
Dennis Callahan, MA Convention Center Authority (represented by Shannon McDermott)  
Carol Chirico, General Services Administration  
Handy Dorceus, Tufts University (not present)  
Gregory Galer, Boston Preservation Alliance  
Susan Goldberg, U.S. Court House  
Susanne Lavoie, Wharf District Council (represented by Erin Piccirilli)  
Richard Martini, The Fallon Company  
Bud Ris, Green Ribbon Commission  
Patrick Sullivan, Seaport TMA  
Stacy Thompson, LivableStreets

#### **City of Boston**

Chris Osgood, Chief of Streets

Para Jayasinghe, City Engineer  
Joe Fleury, Public Works Department  
Jim Fitzgerald, BPDA  
Patrick Hoey, BPDA  
Rich McGuinness, BPDA  
Jackson Krupnick, Public Works Department  
Mohsen Alqunaie, Public Works Department

**AECOM Team**

Joe Allwarden, AECOM  
Tanner Halkyard, AECOM  
Etty Padmodipoetro, Urban Idea Lab  
Ben Rosenberg, Silman  
Kate Barrett, Regina Villa Associates  
Emily Christin, Regina Villa Associates

**OTHER ATTENDEES**

Nick Black, The Trustees  
Brian Curley  
Matthew Dickey, Boston Preservation Alliance  
Johannes Epke, Conservation Law Foundation  
Steve Hollinger  
Douglas Lemle  
Cecilia Levin  
Chris Mancini, Save the Harbor/Save the Bay  
Rebecca McKevez, Rose Kennedy Greenway  
Kelly McQuillan, U.S. Court House  
Christian MilNeil, Streetsblog Mass  
Charlayne Murrell-Smith, Boston Children's Museum  
Maya Smith, Save the Harbor  
Robin Stewart, Echelon  
Miguel Rosales, Rosales + Partners  
Michael Tyrrell, Friends of the Northern Avenue Bridge  
Jazmine Villalona, Villalona Design  
Micuela Wilson  
Bill Zielinski